To check the test results, test software is provided which is shown diagrammatically in Fig. [1] 2. The test software comprises a first software model 11 which emulates, i.e. imitates the behavior of the combinational logic system of the hardware, i.e. the combinational logic system 1 of Fig. 1. In Fig. 2 diagrammatically showing the software, a second software model 16 is provided which is identical to the first software model 11. This second software model thus similarly emulates the behavior of the combinational logic system 1 of the hardware shown in Fig. 1. The second software model 16 is preceded by the first software model 11, i.e. the input signals it takes over are the output signals of the first software model 11.

On page 6, please replace the second and third paragraphs with the following:

The first software model 11 has primary inputs $PI1_S$ which correspond to the inputs [PI_S] PI of the combinational logic system 1 of Fig. 1. Similarly, the second software model 16 has a primary input $PI2_S$. The second software model 16, switched over by means of multiplexers 17 and 18 and a switching signal $PI1_S$ applied thereto, may receive either the input signal $PI1_S$ or the input signal $PI2_S$. In the software model, these signals are of course used for testing. They are essential because these signals are superimposed on the test samples in the models of the combinational logic systems 11 and 16. The second software model 16 further has primary outputs PO_S.

The test run described above with reference to Fig. 1 for the hardware is performed similarly for the software of Fig. 2. First, a test sample is taken over via the test inputs TI_S in the flip-flops 12, 13, 14 and 15. Subsequently, this test sample is run through the two software models 11 and 16. The output signal of the second software

a3 model 16 is then again taken over in the flip-flops 12, 31, 14 and 15 and can be read via the test output [$TEST_S$] $\underline{TO_S}$.

IN THE ABSTRACT

Please replace the Abstract by the new Abstract submitted herewith as a separate sheet: